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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/926,718	03/25/2002	Jacques Point	P21772	6462

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EXAMINER

WINSTON, RANDALL O

ART UNIT PAPER NUMBER

1655

DATE MAILED: 08/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/926,718

Applicant(s)

POINT ET AL.

Examiner

Randall Winston

Art Unit

1655

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 February 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Acknowledgment is made of receipt and entry of the amendment filed on 06/13/2005.

Claims 1-20 are under examination.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-20 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Gudín et al. (US 5,179,012) in view of Tassigny (Action of Calcium on the Growth of *Axenic Demids*, Internationale Vereinigung Fur Theoretische Und Angewandte Limnologie, Mitteilungen No. 19, P. 292-313, November 1971, see abstract).

Applicant argues that Gudín discloses crushing of the algae and addition of solvent to extract the antioxidants. In contrast, Applicant's method includes centrifuging to extract the microalgae and then collection of extracts by filtration. Applicant's argument is not found persuasive because centrifuging and filtration are known means that would be obvious to employ. Gudín obtains a product with the same anti-oxidant properties, thus, the difference between the two methods does not result in a different product or patentably distinct method.

Furthermore, Applicant argues Gudín discloses re-injection of the oxygen collected. In contrast, according to Applicant's method the photoreactor is sealed in order to naturally increase the oxygen concentration in photosynthesis. Applicant's argument is

Art Unit: 1655

not found persuasive because Gudin obtains a supersaturated solution because the oxygen is reintroduced while the reactor is under increased pressure (see, column 8, lines 24-26). Thus, the reactor conditions have the same end result even if Gudin includes additional method steps.

Moreover, Applicant argues Gudin discloses adding carbon dioxide during the re-injection of oxygen. In contrast, Applicant's method includes the addition of potassium bicarbonate. Applicant's argument is not found persuasive because as the examiner explained in his non final rejection of 02/14/2005, for applicant to obtain an improved method of preparing the same claimed heat-stable extract product as Grudin, it would be obvious for applicant to modify Grudin's method of preparation steps (i.e.. even if Gudin discloses adding carbon dioxide during the re-injection of oxygen) and to include Tassigny's teaching of potassium salt can be added to a culture medium containing a microalgae for the purpose of maintaining growth of a microalgae because the two combined teaching would created applicant improved claimed method of preparation.

In addition, Applicant argues that an obviousness rejection cannot be supported by mere allegations that it would have been obvious to arrive at Applicant's invention because any combination of the two documents would not arrive at Applicant's disclosed and claimed invention and also examiner's rejection does not establish each and every feature recited in Applicant's claims, but merely asserts that various features of Applicant's claims are deemed merely a matter of judicial selection and routine optimization which is well within the purview of the skilled artisan. Applicant's arguments are not found persuasive because again as examiner has stated above that examiner

Art Unit: 1655

had explained in his non final rejection of 02/14/2005, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Gudin et al.'s teachings and to include the beneficial teachings of Tassigny because the above combined teachings would create an improved method of preparing a heat-stable extract whereas the improved heat-stable extract would intrinsically have the claimed functional effects such as antioxidant and wound healing activity, antiradical activity, tissue regeneration activity, slow skin aging activity, anti-inflammatory activity and biological control of plant parasite activity when administered to a subject . The adjustment of these and other conventional working conditions (e.g. separating the microalgae from the culture medium by centrifuging instead of crushing and grinding, the claimed additional step of filtering the culture medium whereas the claimed filter step would only provide for a more purified heat-stable extract, the substitution of one functional equivalent potassium salt for another such as the substitution of potassium bicarbonate for another potassium salt for the purpose of maintaining the growth of the microalgae, the claimed period of closing the photobioreactor, and the type of composition such as a food product and/or cosmetic), is deemed merely a matter of judicial selection and routine optimization which is well within the purview of the skilled artisan.

Accordingly, the invention as a whole was prima facie obvious to one of ordinary skill in the art at the time the invention was made, as evidenced by the references, especially in the absence of evidence to the contrary.

Art Unit: 1655

No claims are allowed.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Randall Winston whose telephone number is 571-272-0972. The examiner can normally be reached on 8AM-5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bruce Campell can be reached on 571-272-0974. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 1655

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Susan D. Coe

8-18-05

**SUSAN COE
PRIMARY EXAMINER**